



State of New Jersey

Department of Environmental Protection

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Division of Solid and Hazardous Waste
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CLOSURE PLAN APPROVAL

Under the provisions of N.J.S.A. 13:1E-1 et seq., known as the Solid Waste Management Act, this Solid Waste Closure Plan Approval is hereby issued to:


New Jersey Department of Transportation

FACILITY TYPE: Sanitary Landfill
FACILITY NUMBER: 1103B (1103000454)
BLOCK & Lot NO. (S): 484/15, 21, 41
MUNICIPALITY: Hamilton Township
COUNTY: Mercer
CLOSURE YEAR: 2002

This Approval is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This Approval shall not prejudice any claim the State may have to riparian land, nor does it permit the registrant to fill or alter or allow to be filled or altered, in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this state without prior acquisition of the necessary grants, permits or approvals from the Department of Environmental Protection.

May 17, 2001
Date


Thomas Sherman
Assistant Director
Office of Permitting and
Technical Programs

1. Approved Closure Plan

The owner shall close and maintain the landfill in accordance with N.J.A.C. 7:26-2A.9, the conditions of this Approval, and the following documents, which are the approved Closure Plan:

- a. "Landfill Closure Plan, Duck Island Remediation, Hamilton Township, County of Mercer, New Jersey" dated April 2001 and prepared by TAMS Consultants, Inc.
- b. "Design Report-Final Submission, Duck Island Remediation, Hamilton Township, County of Mercer, New Jersey" dated January 2001 and prepared by TAMS Consultants, Inc.
- c. Engineering design drawings 1 to 40 entitled "State of New Jersey Department of Transportation - Plans of Duck Island Remediation" dated May 10, 2001 and signed and sealed by Andrew Leung, P.E. (N.J. License No. GE30354).
- d. Cover letter dated April 11, 2001 signed by Andrew Leung, P.E. from TAMS Consultants, Inc. along with the enclosed Solid Waste Facility Permit Application Form.
- e. Response to Comments Letter dated May 10, 2001 signed by Andrew Leung, P.E. from TAMS Consultants, Inc. along with the enclosed supplementary material.

In case of conflict, the provisions of N.J.A.C. 7:26-1 et seq. shall have precedence over the conditions of this Approval, and the conditions of this Approval shall have precedence over plans and specifications listed above.

2. Final Cover

Final cover shall consist of the following in ascending order on the top slopes:

- a. minimum of 6 inches of clean fill material covering the waste
- b. geotextile to protect the geomembrane
- c. 60-mil VFPE (or equivalent) textured geomembrane
- d. geonet with bonded geotextiles on each side
- e. 18-inch layer of common fill (NJDOT I-10)
- f. 6-inch layer of topsoil

Final cover shall consist of the following in ascending order on the side slopes:

- a. minimum of 6 inches of clean fill material covering the waste
- b. 60-mil VFPE (or equivalent) textured geomembrane
- c. geonet with bonded geotextiles on each side
- d. 18-inch layer of common fill (NJDOT I-10)
- e. 6-inch layer of topsoil

The final cover shall be graded in accordance with the

Closure Plan. Construction of the final cover shall be completed by 2002.

There shall not be any future use of the landfill that may result in the alteration of the final cover, subsequent to closure activities, without review and approval by the Department.

3. Soil Erosion and Sediment Control

Soil erosion and sediment control shall be achieved in accordance with the New Jersey Department of Transportation Soil Erosion and Sediment Control Standards.

4. Landfill Disruption Operations

The disruption of waste during closure operations shall be conducted in accordance with N.J.A.C. 7:26-2.11 and the following conditions:

- a. A minimum of 6 inches of clean soil shall be placed over any exposed waste at the end of each workday or more frequently if odors or vectors are a problem. A minimum of 12 inches of clean soil shall be applied to all waste exposed for any period exceeding 24 hours and extending up to six months. Thereafter, a minimum of 2 feet of final cover shall be applied and maintained over the waste material.
- b. The disruption activities shall not cause any air contaminant to be emitted in violation of N.J.A.C. 7:27-5.2(a). Malodorous emissions shall be controlled by the use of daily cover. In the event that this is not satisfactory, a suitable deodorant shall be used. Malodorous solid waste shall be covered immediately after excavation, unloading or redeposition with a minimum of six inches of cover material or approved alternative material.
- c. In the event that chemical or hazardous waste materials are encountered during the disruption, operations shall cease immediately and the area shall be secured. The contractor shall notify the Department by calling the Environmental Action Hot Line at 1-877-WARN DEP and take all necessary precautions for the safe removal and disposal of the waste to an approved facility under the direction of this Department.
- d. The contractor shall follow the Occupational Safety and Health Administration (OSHA) standards and the Health and Safety Plan submitted as part of the application during all on-site activities for the safety of employees and for others entering the site. A copy of

the operating safety procedures shall be posted on-site. On-site air monitoring (OVA, HNU, etc.) shall be provided to ensure worker safety during all disruption activities.

- e. The Bureau of Solid Waste Compliance and Enforcement shall be notified at (609) 584-4180 at least 72 hours prior to the initiation of any disruption activities.

5. Schedule for Completion of Closure Work

The completion date for the closure work shall be as follows:

<u>Closure work</u>	<u>Completion Date</u>
Regrade Landfill	February 2002
Install Geomembrane	March 2002
Final Cover Completion	December 2002

6. Professional Engineer's Certification

Pursuant to N.J.A.C. 7:26-2A.9(d)10, within six (6) months of closure of the landfill, the owner and/or operator of the landfill shall obtain and submit to the Department an "as-built" certification by a New Jersey licensed professional engineer, certifying that the provisions of the Closure Plan have been implemented as designed and approved, subject to following requirements:

- a. A New Jersey licensed professional engineer shall certify, in writing, to the Department that he or she has supervised the inspection of the construction of each major phase of the landfill closure. He or she shall further certify that each phase has been prepared and constructed in accordance with the closure design approved by the Department. The certification shall include as-built drawings.
- b. A New Jersey licensed professional engineer shall certify that the materials utilized in the closure of the landfill are in conformance with and meet the specifications of the approved closure designs.
- c. There shall be no deviation from the approved closure design without the prior written approval of the design engineer and, at a minimum, prior verbal approval by the Department.
- d. All certifications shall bear the raised seal of the licensed professional engineer, his or her signature and the date of certification.

- e. The certification shall include the following statement: " I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals under my supervision, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for a civil administrative penalty pursuant to N.J.A.C. 7:26-5 and that submitting false information may be grounds for denial, revocation or termination of any solid waste facility permit for which I may be seeking approval or now hold."

No work performed under this Approval shall be considered complete until such engineer's certification has been submitted to and accepted by the Division of Solid and Hazardous Waste. In the event that said certification is not received or is not accepted, the work shall be considered incomplete.

7. Deed Restriction

Upon closure of the sanitary landfill, a detailed description of the landfill shall be recorded, along with the deed, with the appropriate county recording office. The description shall include the general types, locations, and depths of wastes on the site, the depth and type of cover material, the dates the landfill was in use and all such other information as may be of interest to potential landowners, and shall remain in the record in perpetuity. A copy of the recorded deed description shall be submitted to this Division.

8. Final Cover Maintenance

The final cover shall be maintained. Settled areas shall be filled.

9. Methane Gas Monitoring

A methane gas survey shall be performed in the landfill buffer zone along Route 29 on a quarterly basis. The survey shall be performed with a hand-held portable explosimeter or equivalent and the minimum sampling depth shall be three feet below the ground surface or above the water table, whichever is higher. The maximum interval between sampling points shall be 300 feet. Survey results shall be submitted to the Division of Solid and Hazardous Waste within thirty (30) days of the completion of testing.

Prior to placement of the geomembrane cap on the landfill, an initial methane gas survey shall be performed in the landfill buffer zone along Route 29. The survey results shall be submitted to the Division of Solid and Hazardous Waste within thirty (30) days of the completion of testing.

10. Compliance with other Laws and Regulations

The issuance of this Approval does not exempt the applicant from obtaining all other permits or approvals required by law or regulations.

11. Right of Entry

Department inspectors shall have the right to enter and inspect the facility at any time. The right to inspect includes, but is not limited to:

- a. Sampling materials on site;
- b. Photographing any portion of the facility;
- c. Investigating an actual or suspected source of pollution of the environment;
- d. Ascertaining compliance or non-compliance with the statutes, rules or regulations of the Department, including conditions or any permit or approval issued by the Department;
- e. Reviewing and copying all applicable records, which shall be furnished upon request and made available at all reasonable times for inspection.

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